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The Legality of Local Content Measures under WTO Law

Holger P. HESTERMEYER & Laura NIELSEN^{*}

Local content measures have proliferated and become a popular tool for governments to incentivize national industry. This article sets out a typology of such measures and analyses the legality of the different types of measures under WTO law. Questions arise not only with respect to national treatment, the government procurement exemption and the rules on state trading enterprises under the GATT, but also with respect to the TRIMs Agreement, the SCM Agreement as well as the GATS. The article concludes that very few measures can be considered compatible with WTO law.

1 INTRODUCTION

Recessions are times of significant political pressure for protectionism. While the WTO has ensured that the 2008/2009 recession did not give rise to tariff hikes reminiscent of the infamous Smoot-Hawley Tariff, other protectionist measures have come into fashion. Particularly prominent among these are local content measures.¹ They have gained prominence in the context of the production of renewable energy.² A recent study claims that in the wake of the 2008/2009 recession more than 100 new local content requirements have been adopted, amongst others by Australia, Canada, the United States, Argentina, Brazil, China, India, Indonesia and Kazakhstan.³ However, these measures are by no means new, nor has their adoption been limited to times of recession or the area of renewable

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¹ We will refer to such measures interchangeably as 'local content measures', 'local content requirements' or 'national content requirements'.

² See S. Stephenson, Addressing Local Content Requirements in a Sustainable Energy Trade Agreement, ICTSD June 2013.

³ See G. Hufbauer et al., *Local Content Requirements: Report on a Global Problem*, Peterson Inst. Intl. Econ., Washington DC (2013).

energy. For example, companies wishing to expand to emerging markets with high growth, in particular to the BRIC countries, often face local content requirements. Even though these measures cause considerable cost for industry, they have rarely been addressed in the WTO.

The recent challenge of Canada's use of local content requirements in its feed-in tariff programme in *Canada – Renewable Energy*,⁴ however, seems to have changed the mood, leading to more frequent attacks of such measures, as indicated by China's request for consultations concerning measures affecting the renewable energy generation sector adopted by Italy and Greece⁵ and a similar request by the US targeting Indian measures with respect to solar cells and modules.⁶ Finally, Argentina's request for consultations with the EU concerning biodiesel to some degree also concerns some of the same issues.⁷ Politically, such measures are now being discussed extensively in the TRIMs Committee.⁸

Local content measures condition the grant of a benefit on the use of local goods and/or services in producing goods and/or services. They are quite diverse, encompassing local content conditions for such important benefits as obtaining a governmental or state trading enterprise contract, market access or access to financial stimuli. Their immediate effect is to force foreign companies to cooperate closely with local industry in their procurement, set up a subsidiary or engage in local production. The country adopting such measures hopes to develop its industry by forcing the foreign company to buy from the local industry or even invest in the country. However, the measures also place a significant burden on industries seeking to expand in these markets, because it forces companies to have components produced locally instead of selecting the provider solely on the basis of quality and cost. It thus skews competition – a skewing effect that, depending on how local content is measured, can run all through the production chain.

Local content measures are by no means new: they have been flourishing – and the subject of trade negotiations – for decades.⁹ Praised and considered to be

⁴ See *Canada – Certain Measures Affecting the Renewable Energy Generation Sector* Appellate Body Report, WT/DS412/AB/R, DS426/AB/R (6 May 2013) [hereinafter *Canada – Renewable Energy* Appellate Body Report].

⁵ See *EU and Certain Member States – Certain Measures Affecting the Renewable Energy Generation Sector*, Request for Consultations by China, WT/DS452/1 (7 Nov. 2012).

⁶ See *India – Certain Measures relating to Solar Cells and Solar Modules*, Request for Consultations by the United States, WT/DS456/1 (11 Feb. 2013).

⁷ See *EU and Certain Member States – Certain Measures on the Importation and Marketing of Biodiesel and Measures Supporting the Biodiesel Industry*, Request for Consultations by Argentina, WT/DS459/1 (23 May 2013).

⁸ See G/TRIMS/M/34 of 19 Jun. 2013, the minutes of meetings show that the discussion of local content measures has grown exponentially.

⁹ Examples abound. See only the US request list on non-tariff measures asking Australia to bind its 80% local content requirement in the motor vehicles, parts and components sector and requesting similar action from other countries. Submission of Request Lists, United States, GATT Doc.

an effective tool for development of national industry or transfer of technology by some,¹⁰ others, particularly developed countries, regard them as non-tariff trade barriers that lead to the establishment of fundamentally non-competitive national industries.¹¹ Despite of their defence by some as a development policy measure, WTO members agreed to include relevant investment measures in the illustrative list of trade-related investment measures (TRIMs) inconsistent with the obligation of national treatment in the TRIMs Agreement,¹² and such measures seemed to be on their way to elimination.¹³ However, recent years have seen an astounding revival of local content measures, both by developing and developed countries, for example the US' Buy America Act¹⁴ and Ontario's Feed-In Tariff programme. The latter has been found to be in violation of Article 2.1 of the TRIMs Agreement and Article III:4 of the General Agreement on Tariffs and Trade (GATT) in the case *Canada – Renewable Energy*.

Despite their widespread adoption, enormous impact and doubtful legality, local content measures have neither been properly categorized nor comprehensively analysed as to their WTO legality, even though they enjoy occasional popularity with economists as a topic. With this article, we intent to fill that scholarly void and also assist governments in their quest to use local content rules for development purposes without running afoul of their WTO obligations, for which there remains very little scope. Moreover, we hope that this article will inspire governments to discuss their response to local content measures – something we will illustrate is greatly needed.

In a first step, we will establish a taxonomy of local content requirements. As we understand local content requirements to be measures that condition a benefit on the use of local goods and/or services in producing goods and/or services, we

MTN/NTM/R/10, 17 Nov. 1977. Colombia stated to have similar policies in the automotive sector in Provisional Accession of Colombia, Questions and Replies, see GATT Doc. L/4085, 10 Oct. 1974.

¹⁰ For some indication of positive effects: K. Takechi & K. Kiyono, Local content protection: specific-factor model for intermediate goods production and market segmentation, Japan and the World Economy 15 (2003), 69–87; W. Gu & S. Yabuuchi, *Local Content Requirements and Urban Unemployment*, 12 Intl. Rev. Econ. & Fin. 481–494 (2003).

¹¹ See, e.g., the US argument in the negotiations leading up to the TRIMs Agreement, Negotiating Group on Trade-Related Investment Measures, Submission by the United States, GATT Doc. MTN/NG12/W/9, 9 Feb. 1988, 3.

¹² See the Annex to the TRIMs Agreement.

¹³ See, e.g., Brazil's statement that local content requirements have been eliminated, Trade Policy Review Mechanism, Brazil, Report by the Secretariat, GATT Doc. C/RM/S/29A, 15 Sep. 1992, at para. 287 and China's commitment to eliminate and cease to enforce local content requirements in investment, See Protocol on the Accession of the People's Republic of China, WT/L/432 of 23 Nov. 2001, Part I 7 (Non-Tariff Measures) at para. 3 as well as Annex 1A, IV, 8 (TRIMs) (a).

¹⁴ The first Buy American statute stems from 1933. We here refer to the Buy America provision on the American Recovery and Reinvestment Act of 2009. See Hufbauer et al., *supra* n. 3, at 6.

shall classify the requirements according to the benefits that are granted.¹⁵ Brazilian local content rules constitute a prime example, as Brazilian presidents have openly called for local content requirements of up to 90%.

Second, we will examine the legality of local content requirements under WTO law. Various WTO rules come into play, in particular the TRIMs Agreement, the GATT, the GATS, the SCM Agreement and, finally, rules on government procurement. Government procurement is regulated by a plurilateral WTO Agreement (the GPA¹⁶) so that WTO Members that have chosen *not* to sign on to the GPA are *not* bound by its rules. This probably explains why Brazilian presidents openly advocate local content requirements, because Brazil is not a State party to the GPA and could thus claim its measures were not bound by GPA rules. That may, however, have changed after the Appellate Body in *Canada – Renewable Energy* found the scope of government procurement to cover a much narrower field of measures than assumed by Brazil. The line between government procurement, state trading and normal trade in goods and services is of the utmost importance in the analysis of the legality of local content requirements, and this article dedicates a great deal of attention to drawing this line.

In a third and final step, we will present the political and economic context of local content requirements, trying to explain why they rarely face any challenge. The part will also contain recommendations as to the use and challenge of local content requirements.

2 LOCAL CONTENT MEASURES: A TAXONOMY

As defined above, we understand local content measures as measures that condition a benefit on the use of local goods and/or services in producing goods and/or services.¹⁷ The following pages are dedicated to establish a taxonomy of such

¹⁵ As investment measures, the term has been defined both by the US and the – at the time – EC. The US describes local content requirements as ‘typically oblig[ing] an investor to produce or purchase from local sources some percentage or absolute amount of the value of the investor’s production. These measures are essentially the same as local sourcing or import substitution requirements as the investor is obliged in both cases to source inputs locally rather than import. ...’ Negotiating Group on Trade-Related Investment Measures, Submission by the United States, GATT Doc. MTN.GNG/NG12/W/9, 9 Feb. 1988, 3. The EC stated that ‘local content requirements can require that a given percentage of the value of the final output must be either of local origin, or purchased from local sources’. Negotiating Group on Trade-Related Investment Measures, Submission by the European Communities, GATT Doc. MTN.GNG/NG12/W/8, 23 Jun. 1987.

¹⁶ See Agreement on Government Procurement, Annex 4(b) to the WTO Agreement. An amended Agreement has been negotiated, but not yet come into force.

¹⁷ Even this broad definition does not capture some measures. Thus, countries can also demand the employment of local workers (as is the case for example in Kazakhstan. See USTR Report on Foreign Trade Barriers (2012) 231), a requirement that is not examined in this article.

measures.¹⁸ As all local content requirements share the characteristic that they condition a benefit on the use of local content, we have chosen to classify local content requirements according to the benefit granted. It should however be noted that this is not the only relevant descriptor of local content requirements. They can also be categorized by their method of calculating the domestic content, most commonly by 'value added'.¹⁹ This is normally done referring to the 'rules of origin', which also decide whether a product counts as national for purposes of benefiting from a certain FTA. The construction of these very rules can be used and often is used as a policy tool for advancing local industry too. This article will however solely focus on the local content rules relating to obtaining a benefit.

2.1 LICENSING

Many activities require a license or permit granted by a government agency. Some licensing requirements are rather common. Thus, broadcasting stations need to apply for broadcasting licenses or mining businesses for mining permits almost everywhere. Other licensing requirements are less common and are not required for all relevant activities, such as licenses for importers²⁰ or investors.²¹

Licenses can be granted in limited numbers or to any applicant fulfilling the relevant conditions. In both cases, however, licensees generally have to comply with certain conditions to obtain and maintain their license – whether those conditions are imposed contractually or by statute. Some states have opted to make the use of local content one of these conditions. The precise amount of local content the licensee has to use can be determined in several ways. It can be fixed by law, as is commonly the case in cultural content requirements, or it can be part of the offer of the licensor itself. The latter model can be used in licenses that are auctioned off: the state evaluates the bids and takes the amount of local content promised into account as one criterion, giving preference to bidders promising to use more local content. It is also possible to combine the two: a minimum content

¹⁸ See also Heymi Bahar, Jagoda Egeland, & Ronald Steenblik, *Domestic Incentive Measures for Renewable Energy With Possible Trade Implications*, OECD Trade and Environment Working Papers 2013/01 (OECD Publ. 2013).

¹⁹ Other ways of expressing the percentage of domestic content are, of course, conceivable. Thus, Australia used to maintain a local content requirement for use of domestic tobacco leaves, expressed as a ration of domestic to total leave usage defined physically by weight. See J. C. Beghin & C. A. Knox Lovell, *Trade and Efficiency Effects of Domestic Content Protection: The Australian Tobacco and Cigarette Industries*, Rev. Econ. & Statistics 623 (1993).

²⁰ Important licenses are subject to the Agreement on Import Licensing Procedures.

²¹ Some countries require a permission for some investments. One well-known example is in *Canada – Administration of the Foreign Investment Act* Panel Report, L/5504 – 30S/140 (adopted on 7 Feb. 1984) [hereinafter *Canada – FIRA* Panel Report].

is fixed by law, but applicants offering to use more local content are given preference in the bidding process.

2.1[a] *Cultural Content Requirements*

The best-known use of local content requirements to obtain a license consists in the requirement to use local cultural content. Screen quotas were introduced in Europe after the First World War to protect the national industry from the impact of the extraordinarily successful American film industry.²² Regarded as an essential tool for promoting cultural identity, some nations were not ready to give them up after the Second World War and insisted on an exception permitting such policies in the GATT. Article IV of the GATT fulfils this function, explicitly allowing internal quantitative regulations relating to exposed cinematograph films taking the form of screen quotas under certain conditions. Exposed cinematograph films (heading 3706 of the HS) was the most important medium relating to movies at the time.²³ However, both that medium and screen quotas themselves have lost much of their significance with later technological developments.²⁴ Foreseeably, these developments resulted in a debate whether Article IV of the GATT extends to later technologies that replaced cinematograph films.²⁵

The protection of national cultural expression is most commonly pursued by national content quotas relating to television and radio. Australia, for example, introduced local content requirements in broadcasting as early as 1942.²⁶ Nowadays, commercial television free-to-air broadcasting licensees have to broadcast at least 55% Australian programmes between 6 a.m. and midnight on an annual basis to develop and reflect 'a sense of Australian identity, character and cultural diversity'.²⁷ Licensees in compliance with the content requirement are

²² See I. Bernier, *Local Content Requirements for Film, Radio and Television as a Means of Protecting Cultural Diversity: Theory and Reality* (Section I) (available at <http://www.diversite-culturelle.qc.ca/fileadmin/documents/pdf/update031112section1.pdf>).

²³ See L. Ehrling, *Article IV*, in *WTO – Trade in Goods* para. 5 (R. Wolfrum et al. eds., Martinus Nijhoff Publishers 2011).

²⁴ Despite this some countries still maintain similar measures. See http://www.terramedia.co.uk/media/film/quotas_and_levies.htm for an overview.

²⁵ See, e.g., Request for Consultations under Art. XXII:1 by the United States, *EEC – Directive on Transfrontier Television*, DS4/3 (8 Nov. 1989). For an overview of the discussion, see L. Ehrling, *supra* n. xx, at paras. 3–16.

²⁶ See P. Mason, *Assessing the Impact of Australian Music Requirements for Radio* (available at <http://www.mca.org.au/research/research-reports/research-reports/637-assessing-the-impact-of-australian-music-requirements-for-radio>).

²⁷ Broadcasting Services Act 1992, there are specific subquotas for drama, documentary and children's programmes and an 80% quota for advertising. See <http://www.acma.gov.au/Industry/Broadcast/Television/Australian-content/australian-content-television>; <http://www.acma.gov.au/Industry/Broadcast/Television/TV-content-regulation/tv-content-regulation>.

eligible for a license fee rebate.²⁸ Radio stations have to play in between 10% and 25% of music performed by Australians between 6 a.m. and midnight, with a sub-quota for new Australian performances.²⁹

While the Australian rules are based on Australian nationality or residency, similar rules can also be based on language. Thus, French private radio companies operate under a contract with the state under which a minimum of generally 40% of the musical works broadcast during the most significant listening hours have to be in French or in a regional language used in France, of which half have to come from new talents or productions.³⁰ A channel violating its obligations may suffer financial sanctions or even suspension of its programming or withdrawal of the license.³¹

Cultural content requirements are amongst the better-known content requirements and have been a popular topic for academic discussions. Given their special legal role and the amount of excellent literature on them,³² we will not discuss them any further in this article.

²⁸ The relevant Television Licence Fees Amendment Regulations 2010 (No. 1) is available at <http://www.comlaw.gov.au/Details/F2010L01591>. The requirement is monitored by the Australian Communications and Media Authority. Compliance reports are published on a regular basis, see, e.g., http://www.acma.gov.au/webwr/aba/tv/content/requirements/australian/documents/2011_metro_compliance_results.pdf, http://www.acma.gov.au/WEB/STANDARD/pc=PC_410408.

²⁹ See Code 4 of the Codes of Practice and Guidelines (available at <http://www.commercialradio.com.au/files/uploaded/file/Commercial%20Radio%20Codes%20&%20Guidelines%20%205%20September%202011.pdf>). Compliance is monitored by the Australian Music Performance Committee. The latest compliance report is available at http://www.aria.com.au/pages/documents/AMPCOMReport2011_000.pdf. A short description of the Australian system can also be found in Trade Policy Review, Report by the Secretariat, Australia, WT/TPR/S/244/Rev. 1 (1 Mar. 2011) at para. 86.

³⁰ See Art. 28 2° bis Loi n° 86-1067 du 30 Sep. 1986 relative à la liberté de communication (Loi Léotard). The quota was introduced by the loi du 1er février 1994. For details see <http://www.csa.fr/Radio/Le-suivi-des-programmes/La-diffusion-de-chansons-d-expression-francaise/Les-criteres-pris-en-compte-pour-mesurer-les-quotas>. Compliance with the contractual obligation is monitored by the Conseil Supérieur de l'Audiovisuel.

³¹ See <http://www.csa.fr/Radio/Le-suivi-des-programmes/La-diffusion-de-chansons-d-expression-francaise/Les-sanctions-en-cas-de-manquement>. Statistics on actions taken are available at <http://www.csa.fr/Radio/Le-suivi-des-programmes/La-diffusion-de-chansons-d-expression-francaise/Les-constats>.

³² See, e.g., Tania Voon, *Cultural Products and the World Trade Organization* (Cambridge U. Press, 2007); Anna Herold, *European Film Policies in EU and International Law: Culture and Trade, Marriage Or Misalliance* (Europa Law Publ. 2010); Mira Burri-Nenova, *Trade and Culture: Making the WTO Framework Conducive to Cultural Considerations*, 5 *Manchester J. Int'l Econ. L.* 2–38 (2008); R.J. Neuwirth, *Culture and Trade?: A European Way 'Towards an International Instrument on Cultural Diversity*, 13 *Italian Y.B. Intl. L.* 97–129 (2005); Pierre Sauvé & Karsten Steinfatt, *Towards Multilateral Rules on Trade and Culture: Protective Regulation or Efficient Protection?* in *Trade Rules behind Borders: Essays on Services, Investment and the New Trade Agenda*, 193–219 (Pierre Sauvé ed., Cameron May 2003); Bruno De Witte, *Trade in Culture: International Legal Regimes and EU Constitutional Values*, in *The EU and the WTO: Legal and Constitutional Issues* 237–255 (G. De Burca & J. Scot ed., Hart Publ. 2001).

2.1[b] *Licensing in the Exploitation of Natural Resources*

The exploitation of the natural resources of a country is an attractive field for foreign investors. Many countries regard their resources not just as a financial benefit in and of themselves, but as a starting point to foster industrial development. Conditioning the grant of the concessions required to exploit resources on the use of local content is one of the means employed in this respect.

The Brazilian government has implemented one of the better-known local content schemes in this field.³³ ANP (Agência Nacional do Petróleo, Gás Natural e Biocombustíveis), Brazil's regulatory agency relating to oil, natural gas and biofuels³⁴ conducts bidding rounds and concludes concession agreements with companies winning the respective rounds.³⁵ Ever since the first bidding round in 1999³⁶ local content requirements were included in these agreements.³⁷ In the first bidding rounds, companies were free to offer a commitment on local content that would improve the points awarded in the evaluation of their bid. However, from 2003 onwards, with the creation of the 'Program of Mobilization of the National Petroleum and Natural Gas Industry', the explicit goal has been to maximize Brazilian content.³⁸ In later rounds accordingly, minimum percentages of local content – varying depending on the location – were introduced, and the criterion of local content became more important in the evaluation of bids.³⁹ The ANP statistics show that the average local content offering in round 10 for development of on-shore blocks was over 80%. The offer as to local content accounted for 20% of the final score of a bid.⁴⁰ Upon award of the concession, the local content requirement is included in the concession agreement and thus becomes a contractual obligation of the concessionaire. The latter complies with

³³ For a thorough treatment, see Claudio Eduardo Lobato de Abreu Rocha, *O Conteúdo Local na Concessão: Da Licitação à Fiscalização*, Rio de Janeiro, December 2010.

³⁴ Set up by decreto N° 2.455, de 14.1.1998.

³⁵ See Art. 23 Lei N° 9.478 of 6 Aug. 1997.

³⁶ An earlier bidding round, round zero, had no local content requirement, but the Brazilian Petrobrás was the sole bidder.

³⁷ For the wording of such a clause, see clause 20 in http://www.anp.gov.br/brasil-rounds/round10/arquivos/editais/Conc_agreement%20R10.pdf (Round 10).

³⁸ See Decreto N° 4.925 of 19 Dec. 2003. Information is available at <http://www.prominp.com.br/data/pages/8A95488830FCBB0C013123EAF3952F61.htm>.

³⁹ Since round seven, there are minimum and maximum offers for local content. A general introduction of the topic can be found at <http://www.anp.gov.br/?pg=25628&m=&t1=&t2=&t3=&t4=&ar=&ps=&cachebust=1341231498104>; for a third-party report, see Heller Redo Barroso & Marcos Macedo, *Local Content in Brazilian Oil Industry* (available at http://www.hrblaw.com.br/files/local_content_in_brazilian_oil_industry.pdf; An overview over the rounds is available at http://www.brazil-rounds.gov.br/ingles/resumo_geral.asp#).

⁴⁰ See http://www.braziltexas.org/attachments/wysiwyg/1/ANP_Marcelo%20Mafra_BEP9_Local%20Content_September_2011_English.pdf.

the obligation by following an intricate certification system introduced in 2007⁴¹ using a local content primer known as 'Cartilha de Conteúdo Local'.⁴² The ANP monitors compliance and can issue fines for non-compliance proportional to the amount of that non-compliance.⁴³ It did so for the first time in 2011, fining the (largely government-owned) Brazilian oil giant Petrobras, which holds over 90% of the concessions.⁴⁴ To comply with its obligation, the concessionaire passes the content requirement on in its supply chain. Thus, Petrobras includes minimum local content requirements in its supply arrangements. The precise content requirements vary, thus Petrobras announced in August 2012 that nine drilling vessels would be constructed with local content between 55% and 65%.⁴⁵ Its 2009 Sustainability report mentions local content requirements of between 60% and 65% for platform construction and between 70% and 80% for the construction of 146 new vessels.⁴⁶ Some expect content requirements to go as high as 95% for some equipment by 2020. However, the practical challenges are daunting, as the scale of Petrobras supplies is staggering and Brazilian industry will have a hard time to supply the amount of local content needed. Petrobras is, for example, planning to build or buy about 250 ships to exploit oil fields.⁴⁷

2.1[c] *Import Licenses*

Import licenses have also been used as a hook for attaching local content requirements. The *India – Autos*⁴⁸ case illustrates how this can be done. At the time of the case, India maintained a comprehensive import-licensing regime that included the importation of cars as completely and semi-knocked down ('CKD/SKD') kits.⁴⁹ A company wishing to import such kits had to sign a Memorandum of Understanding with the Director General of Foreign Trade,

⁴¹ See Resolution ANP N° 36/2007.

⁴² See http://www.braziltexas.org/attachments/wysiwyg/1/ANP_Marcelo%20Mafra_BEP9_Local%20Content_September_2011_English.pdf.

⁴³ See ANP, Local Content in Brazilian Oil & gas industry, May 2012; see, e.g., clause 20.7 of the concession contract Round 10.

⁴⁴ See OSEC, The Brazilian Oil and Gas Sector, <http://www.osec.ch/sites/default/files/Brazil%20Oil%20and%20Gas%20Report.pdf>.

⁴⁵ <http://www.investidorpetrobras.com.br/en/highlights/execution-of-contracts-for-chartering-and-operating-nine-drilling-rigs.htm>.

⁴⁶ See Petrobras, 2009 Sustainability Report, 32, 39.

⁴⁷ See J. Leahy, *Local Supply Policy Tests Petrobras*, Financial Times, March 2012. As a point of comparison: The US Navy in 2011 had 285 active warships. See <http://www.history.navy.mil/branches/org9-4.htm>.

⁴⁸ See *India – Measures Affecting the Automotive Sector* Panel Report, WT/DS146/R, DS175/R (21 Dec. 2001) [Hereinafter *India – Autos* Panel Report].

⁴⁹ The import licensing regime itself was challenged by the European Communities and the United States. Upon request of the US a panel was established that held the restrictions to be in violation of Art. XI:1 GATT and not justified by Art. XVIII:B as alleged by India. See, *India – Quantitative*

stipulating among others an 'indigenization' requirement, i.e., a local content requirement, relating to the components. The minimum level of the requirement was 50% in the third year and 70% in the fifth year.⁵⁰

2.1[d] *Permission for Investment*

Some countries impose a review process for foreign investment under certain circumstances. The use of local content can become a consideration or even a requirement for letting the investor go ahead. The facts of the 1983 *Canada – FIRA*⁵¹ GATT case illustrate this policy. Recognizing that foreigners had started to acquire control of Canadian companies, Canada enacted the 'Foreign Investment Review Act' in 1973. The Act intended to submit the acquisition of control of a Canadian business (or establishment of a new business) by a foreigner to a review to assess whether the investment was 'of significant benefit to Canada'. The effect of the investment on economic activity in Canada, such as the utilization of parts, components and services produced in Canada and on Canadian exports were to be a factor in the assessment whether it was of such benefit. Written undertakings by investors, often negotiated with the Canadian government, were permitted by the Act and became routine for larger investment proposals. They often contained commitments to purchase Canadian content: a sample study undertaken by the Canadian government showed that only 30% of the investors gave no undertakings as to sourcing, whereas the remaining investors made commitments on the purchase of Canadian-made or Canadian-supplied goods or other sourcing commitments. The commitments undertaken by the companies were binding and monitored by the Canadian government.⁵²

2.2 GOVERNMENT PROCUREMENT

Governments regularly prefer local over imported products in their procurement policies. This preference can be reflected in different ways in procurement policies. It might consist of regarding the use of local content as an advantage in bidding procedures or of an outright requirement to buy national goods and services.

Examples of content requirements abound everywhere. To name just one of many US examples, 49 U.S.C. § 24305 (f) (2) requires Amtrak to buy only '(A)

Restrictions on Imports of Agricultural, Textile and Industrial Products Panel Report, WT/DS90/R (16 Apr. 1999) [hereinafter *India – Quantitative Restrictions* Panel Report].

⁵⁰ See *India – Autos* Panel Report, *supra* n. 48, paras. 2.1–2.5.

⁵¹ See *Canada – FIRA* Panel Report, *supra* n. 21.

⁵² See *ibid.*, paras. 2.1–2.12.

unmanufactured articles, material, and supplies mined or produced in the US; or (B) manufactured articles, material, and supplies manufactured in the US substantially from articles, material, and supplies mined, produced, or manufactured in the US' when the cost of those articles, material or supplies bought is at least USD 1,000,000.⁵³

The EU Directive 2004/17/EC of 31 March 2004 as amended coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sector allows the rejection of a tender for a supply contract if more than 50% of the total value of the products constituting the tender originates in third countries with which the EU has no multilateral or bilateral agreement ensuring comparable and effective EU access to the markets.⁵⁴

2.3 FINANCIAL INCENTIVES

Another method of supporting the use of local content is the grant of financial incentives to use such content.

2.3[a] *Feed-in Tariffs*

Feed-in tariffs (FIT)⁵⁵ have emerged as the tool of choice to enable countries to move from the use of fossil fuels to 'green energies' such as wind or solar.⁵⁶ Such programmes provide the producer of green energy with security as to the sale of the energy produced and the price the producer can obtain typically by way of either a long-term purchase agreement with the producer or by obliging utilities to buy the energy produced at a given price. Conveniently, FIT programmes give countries another means to require the use of local content by conditioning the benefit granted by the programme on using local content.⁵⁷ Ontario's FIT programme – recently held to be in violation of Canada's WTO obligations by the WTO Appellate Body – provides an example. To participate in Ontario's FIT

⁵³ In a similar vein Section 1605 of the American Recovery and Reinvestment Act of 2009 (Publ. L. 111-5) prohibits use of recovery funds for the construction, alteration, maintenance or repair of a public building or public work unless all iron, steel and manufactured goods used in the project are produced in the United States – subject to waivers.

⁵⁴ See Art. 58 of the Directive for details. The determination proceeds in accordance with Council Regulation (EEC) No. 2913/92 of 12 Oct. 1992.

⁵⁵ The German feed-in tariff programme has been particularly influential. See, e.g., Mario Ragwitz & Claus Huber, *Feed-In Systems in Germany and Spain and a Comparison* (available at http://www.worldfuturecouncil.org/fileadmin/user_upload/Miguel/feed-in_systems_spain_germany_long_en.pdf).

⁵⁶ See, e.g., recently J. Diekmann et al., *Erneuerbare Energien: Quotenmodell keine Alternative zum EEG*, 79 DIW-Wochenbericht 15–20 (2012). Note, however, that multiple domestic incentives are used to advance such technologies. For a thorough study, see Bahar, Egeland, and Steenblik, *supra* n. 18.

⁵⁷ For an overview, see Bahar, Egeland, and Steenblik, *supra* n. 18, at 34–37.

programme offering twenty- or forty-year contracts, wind power projects with a capacity to produce electricity greater than 10 kW and solar photovoltaic projects with a capacity of up to 10 MW need to include a minimum amount of domestic goods and services in the development and construction of the facility.⁵⁸

2.3[b] *Financing*

Competitive project financing is an essential part of being able to compete in the marketplace. Where development banks offer attractive rates, competitors not eligible for the same rate might not just be at a competitive disadvantage, but simply unable to compete. Where governments are involved in such financing, they often condition access to attractive loans or guarantees on the use of local content.

Australia's Export Finance & Insurance Corporation, for example, offers several financing options including direct loans to overseas buyers of goods with Australian content. The amount of financing available depends directly on the amount of Australian content of the product understood as labour, goods, materials, services, exporter's profits, overhead and financing, insurance and shipping costs in Australia.⁵⁹ Similarly, Brazil's national development bank BNDES (banco nacional do desenvolvimento) can provide credit significantly below market rates and in some cases links such credit to local content requirements.⁶⁰

2.3[c] *Other Financial Incentives, including Tariffs*

Financial incentives are not limited to the ones named above. The most traditional way to grant a preference in international trade is by granting preferential tariffs. Preferential tariff treatment is also used with respect to local content requirements. An example of this type of practice can be found in Ecuador's imposition of a new tariff on automobile knock-down kits, where a discount of 1% for every 2% of local content is granted.⁶¹

⁵⁸ Projects with a capacity of up to 10 kW could benefit from microFIT. See *Canada – Renewable Energy* Panel Report, *supra* n. 4, at paras. 7.64–7.68. As to wind projects, the minimum local domestic content level is 25% for a milestone date for commercial operations before 1 Jan. 2012 and 50% thereafter, the rates for solar projects are even higher.

⁵⁹ See <http://www.efic.gov.au/about/governance/Pages/Australiancontentguidelines.aspx>.

⁶⁰ See Trade Policy Review, Report by the Secretariat, Brazil, WT/TPR/S/212/Rev. 1, part IV p. 50; part V, p. 7; http://www.bndes.gov.br/SiteBNDES/bndes/bndes_en/Institucional/Financial_Support/support_modalities.html.

⁶¹ See USTR Report on Foreign Trade Barriers (2012) 124.

2.4 INFORMAL REQUIREMENTS

All of the above policies share the trait that they are or were official government policies, subject to explicit terms whether put down in statutes, ordinances, regulations or contracts. Often, however, local content requirements are not explicit. Where government procurement policies officially do not discriminate between foreign and local goods, it is not unheard of that decision-makers look favourably upon the use of local content. Likewise, where licenses are supposed to be granted on a non-discriminatory basis, at times local applicants are preferred without good cause. It is difficult to identify these non-legal 'requirements', even though they can, at times, have just as harsh an effect as legal requirements. The USTR's 2012 Report on Trade Barriers mentions several such 'informal requirements'. China is often mentioned as the prime example of such informal requirements. The Chinese government is officially committed to eliminating local content requirements for foreign investments, but 'encourages' investors to include local content on a 'voluntary' basis.⁶²

3 WTO LEGALITY

Given the diversity of measures falling under the heading of local content measures, it can hardly be surprising that not all of them are treated identically in every respect. We have already pointed out that the specifics of cultural content requirements will not be treated in this contribution. As our space is limited, we would like to focus on the essential characteristic shared by all local content requirements, namely the fact that the grant of a benefit is conditioned on the use of local goods and/or services in producing goods and/or services. Where we examine articles concerning goods, we assume that the benefit is (at least partially) conditioned on the use of goods and where we examine the GATS we assume that the benefit can be obtained by the use of local services. Many local content measures do not specify whether the amount of local content required has to be filled by using local goods or local services. In such cases, it can be assumed that both goods and services count towards the local content and hence both benefit from the requirement. In our opinion, in these cases, both GATT and GATS will apply.

⁶² See *ibid.*, p. 66.

3.1 WTO LAW

There is no specific provision in the WTO Agreements that outlaws local content measures per se. However, such measures may violate several provisions in the WTO Agreements.

3.2 NATIONAL TREATMENT: GATT ARTICLE III

The most important provisions affecting local content measures are laid down in the GATT 1994. That Agreement consists of the 'original' GATT 1947 as well as numerous other documents adopted from 1948 until the WTO came into being in 1995.⁶³ One of the very core principles of the original GATT laid down in its Article III is that of national treatment in the sense that imported products may not be discriminated against *vis-à-vis* their domestic counterparts. Local content measures most often violate at least one of the paragraphs of Article III because by their very nature they condition a benefit on the use of goods of national origin and thus discriminate goods according to their territorial origin. In the following, we shall discuss paragraphs 1, 4 and 5 of the provision. Note that if the benefit granted to the national product is a tax advantage, Article III:2 will apply, which for reasons of space cannot be analysed here. According to Article III:8 (a), the rules of Article III do not apply to government procurement. This essential exception will be discussed later under the separate heading of government procurement.

3.2[a] Paragraph 1 of Article III

Article III:1 of the GATT provides that internal measures 'should not be applied to imported or domestic products so as to afford protection to domestic production'. The provision is not applied as a stand-alone provision. Rather, it functions as a principle that informs the rest of Article III.⁶⁴ The core analysis of whether a local content measure is in violation of GATT Article III is therefore deferred to the other paragraphs of the provision.

⁶³ The precise content of the GATT 1994 is set out in the Introductory Note of Annex 1A to the WTO Agreement. Throughout the article, we use the term 'GATT' as meaning GATT 1994 if nothing else is indicated.

⁶⁴ See *Japan – Taxes on Alcoholic Beverages* Appellate Body Report, WT/DS8/AB/R, WT/DS10/AB/R, WT/DS11/AB/R (4 Oct. 1996) [hereinafter *Japan – Alcohol* Appellate Body Report], para. 37.

3.2[b] *Choosing Between Paragraphs 4 and 5 of Article III*

When identifying which of these paragraphs governs local content measures, one may at first think that Article III:5 regulates them more squarely and should hence be applied more often to such measures than paragraph 4. This is, however, not the case. In fact, to date no WTO panel has applied paragraph 5.⁶⁵ The last time it was applied by a panel was in the GATT case *US – Tobacco* in 1994.⁶⁶ After the advent of the WTO, the provision was invoked in a few cases, but discussed so far only in *China – Auto Parts*.⁶⁷ In that case, paragraph 5 was not applied by the panel on grounds of judicial economy as violations of other paragraphs of Article III had already been established.

The jurisprudential preference for Article III:4 is likely more of a coincidence. In WTO cases, the complaining party has to cite to all the treaty provisions it argues the defending party to be in breach of.⁶⁸ In cases concerning local content measures, a complaining party will therefore generally invoke both Article III:4 and III:5. It is then the task of the panel to decide which provision it will analyse first. In the overwhelming majority of cases involving Article III:4 and 5 panels

⁶⁵ H. P. Hestermeyer, *Article III*, in *WTO – Trade in Goods* para. 90 (R. Wolfrum et al. eds., Martinus Nijhoff 2011).

⁶⁶ Before that the GATT Panel in Panel Report, *EEC – Measures on Animal Feed Proteins*, L/4599 – 25S (adopted 14 Mar. 1978) (GATT) [hereinafter *EEC – Animal Feed Proteins* Panel Report] at paras 4.5–4.8.

⁶⁷ See *Philippines – Measures Affecting Trade and Investment in the Motor Vehicles Sector*, Request for the Establishment of a Panel, WT/DS195 (13 Oct. 2000) [hereinafter *Philippines – Motor Vehicles*] where the panel is not yet composed, the case *European Union and a Member State – Certain Measures Concerning the Importation of Biodiesels*, Request for the Establishment of a Panel by Argentina, WT/DS/443/5 (7 Dec. 2012) is in the same stage; *China – Measures Affecting Imports of Automobile Parts* Panel Report, WT/DS339/R, WT/DS340/R, WT/DS342/R (18 Jul. 2008) [hereinafter *China – Auto Parts* Panel Report], para. 7.276. See also Request for Consultations by the United States in *Indonesia – Certain Measures Affecting the Automobile Industry*, WT/DS59/1 (15 Oct. 1996) [hereinafter *Indonesia – Autos*]; Request for the Establishment of a Panel in *Indonesia – Autos*, WT/DS59/6 (13 Jun. 1997) where the United States cited to para. 5 in its request for consultations, but left out the paragraph in its request for the establishment of a Panel and the paragraph is thus not mentioned in the Panel Report; Request for Consultations by Japan in *Canada – Certain Measures Affecting the Renewable Energy Generation Sector*, WT/DS412/ (16 Sep. 2010) [hereinafter *Canada – Renewable Energy*]; Request by Japan for the Establishment of a Panel in *Canada – Renewable Energy*, WT/DS412/5 (7 Jul. 2011) where Japan likewise mentioned the paragraph in the Request for Consultation but left out the paragraph in its Request for the Establishment of a Panel. See also the EU's Request for Consultations in its Recourse to Art. 21.5 of the DSU in *United States – Measures Affecting Trade in Large Civil Aircraft (Second Complaint)*, WT/DS353/16 (2 Oct. 2012) as well as China's Request for Consultations in *European Union and Certain Member States – Certain Measures Affecting the Renewable Energy Generation Sector*, WT/DS452/1 (7 Nov. 2012).

⁶⁸ See Understanding on Rules and Procedures Governing the Settlement of Disputes, WTO Agreements Annex 2 [Hereinafter the DSU] Arts 4, 6, 7; *Korea – Dairy* Appellate Body Report, WT/DS98/AB/R, para. 124.

have started their analysis with the paragraph the parties have cited to *first*.⁶⁹ In *US – Tobacco*, however, the panel diverged from this rule and analysed paragraph 5 first, even though the complaining party had invoked paragraphs 2, 4 and 5 in numerical order, stating that the provision more squarely addressed the issue.⁷⁰ As a matter of law, the relationship of Articles III:4 and III:5 is not supposed to be one of *lex specialis*. Rather, they are supposed to apply cumulatively, and measures have to comply with both provisions. In practice, however, panels generally do not analyse both paragraphs invoked once a violation of one of them has been found – on grounds of judicial economy.⁷¹

3.2[c] Paragraph 4 of Article III

3.2[c][i] The Analytical Steps

Article III:4 reads:

The products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use. The provisions of this paragraph shall not prevent the application of differential internal transportation charges which are based exclusively on the economic operation of the means of transport and not on the nationality of the product.

The Appellate Body analyses an alleged violation of the provision by way of a three-prong test:

For a violation of Article III:4 to be established, three elements must be satisfied: that the imported and domestic products at issue are ‘like products’; that the measure at issue is a ‘law, regulation, or requirement affecting their internal sale, offering for sale, purchase,

⁶⁹ See *EEC – Animal Feed Proteins* Panel Report, *supra* n. 66, at paras. 3.1, 3.5–3.20, 3.37–3.44, 4.5–4.8, 4.10–4.12; *Spain – Measures Concerning Domestic Sale of Soybean Oil* Panel Report, L/5142, Unadopted, 17 Jun. 1981 (GATT) [hereinafter *Spain – Sale of Soybean Oil* Panel Report] at paras. 3.4, 3.7, 4.4–4.7; *Canada – FIRA* Panel Report, *supra* n. 21, at paras. 3.1, 3.4–3.12, 5.4–5.13; *United States – Taxes on Automobiles* Panel Report, DS31/R, Unadopted, 11 Oct. 1994 (GATT) [hereinafter *US – Autos* Panel Report], paras. 3.1, 5.69; *China – Auto Parts* Panel Report, *supra* n. 67, at paras. 3.1–3.10; 7.276, but in this case paras. 2 and 4 are invoked in different order by the parties, but all parties invoked para. 5 last. This has also been the case for cases where more than one paragraph were invoked under GATT Art. XX, see Laura Nielsen, *The WTO, Animals and PPMs* 195 (Martinus Nijhoff Publishers 2007).

⁷⁰ See Panel Report, *United States – Measures Affecting the Importation, Internal Sale and Use of Tobacco*, DS44/R (adopted 4 Oct. 1994) [hereinafter *US – Tobacco* Panel Report], paras. 13–14, 62, 64–65, 72, 125.

⁷¹ But see *EEC – Animal Feed Proteins* Panel Report, *supra* n. 66, at paras. 4.10–4.12 where it seems that the Panel analyses para. 4 for almost identical or overlapping measures as it has just found in violation of para. 5. This is, however, a very old report and that may be why the Panel does not opt for utilizing judicial economy after finding the measure in violation of para. 5.

transportation, distribution, or use'; and that the imported products are accorded 'less favourable' treatment than that accorded to like domestic products.⁷²

The *first element* concerning 'like' products is usually the focal point in Article III cases. This is not the case with respect to cases concerning local content because such measures de jure condition a benefit on the use of local goods and thus discriminate in favour of such goods compared to identical imported goods.⁷³ This is particularly clear where the measure requires a very specific item of local content (say use of nationally produced solar panels).

The *second element* concerns whether the requirement or advantage is derived from a 'law, regulation or requirement' that affects the internal sale, offering for sale, purchase, transportation, distribution or use. The Panel in *US – FSC 21.5* clarified that this requirement concerns the form of the measure, not its content:

In considering these issues, we first consider the *form* of the measure in question. We agree with the views expressed in previous GATT and WTO panel reports that Article III:4 applies also to measures in the form of conditions that must be satisfied in order to obtain an 'advantage' from the government.⁷⁴

Local content requirements always come in the form of conditions in order to obtain an advantage. As illustrated by our examples such requirements can be both mandatory (and e.g., imposed by a statute) and voluntary schemes (such as the promise to use local content in a bid for a concession granted by the government), which private companies adhere to in order to receive a benefit.⁷⁵ In *Turkey – Rice*, the Panel held:

The domestic purchase requirement can clearly be considered as a 'requirement', within the meaning of Article III:4 of the GATT 1994, as it is a condition that importers may voluntarily accept in order to obtain an advantage from the Turkish government, i.e., the ability to import rice at reduced tariff rates.⁷⁶

⁷² *Korea – Various Measures on Beef* Appellate Body Report, WT/DS161/AB/R, WT/DS169/AB/R (11 Dec. 2000) [hereinafter *Korea – Beef* Appellate Body Report], para. 133.

⁷³ The panel in *Turkey – Measures Affecting the Importation of Rice* Panel Report, WT/DS334/R (21 Sep. 2007) [hereinafter *Turkey – Rice* Panel Report], para. 7.214 hence regarded as showing that origin was used as the sole criterion for distinguishing the products as sufficient for showing likeness. The panel in *China – Measures Affecting Trading Rights and Distributional Services for Certain Publications and Audiovisual Entertainment Services* Panel Report, WT/DS363/R (19 Aug. 2009) [hereinafter *China – Audiovisual Services* Panel Report], at paras. 7.1446–7.1447, however, additionally demanded evidence that there can or will be domestic and imported products that are like.

⁷⁴ *United States – Tax Treatment for 'Foreign Sales Corporations'* 21.5 Panel Report, WT/DS108/RW (20 Aug. 2001) [hereinafter *US – FSC 21.5* Panel Report], para. 8.139.

⁷⁵ See *Japan – Measures Affecting Agricultural Products* Panel Report, WT/DS76/R (27 Oct. 1998) [hereinafter *Japan – Agricultural Products II* Panel Report], n. 346. See also *Canada – Certain Measures Affecting the Automotive Industry* Panel Report, WT/DS139/R, WT/DS142/R (11 Feb. 2000) [hereinafter *Canada – Autos* Panel Report], para. 10.73.

⁷⁶ *Turkey – Rice* Panel Report, *supra* n. 73, at para. 7.219.

Consequently, when private companies voluntarily accept to adhere to local content requirements when entering into contractual relations with a government, there is *evidence* pointing to that there is a government measure covered by Article III:4. This was also the conclusion by the GATT Panel in *Canada – FIRA* concerning situations involving a private contractual obligation between an investor and a foreign government.⁷⁷

However, only WTO Members are bound by GATT obligations. In other words, only measures that are attributable to the state⁷⁸ can be relevant requirements. If the measure is an act by the state such as a law this is clearly the case. The situation is more complex if the contract is not concluded with a governmental agency, but with a State-Owned Enterprise (SOE) such as Petrobras or BNDES. The measure will still be a measure by the state if the entity is considered part of the state itself or if the measure is otherwise attributable to the state.

The first difficulty thus is to determine whether SOEs are considered part of the state.⁷⁹ We can find some orientation for that question from the interpretation of the term ‘government or public body’ in the case law on Article 1 of the SCM Agreement. The key issue here is when SOEs are considered ‘public bodies’. In *US – AD CVD (China)*, the Appellate Body examined whether SOEs were public bodies and held that the determination had to focus on ‘whether the entity is vested with or exercises governmental authority’.⁸⁰ Interestingly, however, the Appellate Body worded the test differently when applying it to the facts in the case, relying on whether the entity was vested with authority to perform a governmental *function*.⁸¹

evidence of government ownership, in itself, is not evidence of meaningful control of an entity by government and cannot, without more, serve as a basis for establishing that the entity is vested with authority to perform a governmental function. Accordingly, such evidence, alone, cannot support a finding that an entity is a public body.⁸²

If a panel was to determine the SOE is not considered a ‘public body’, it is deemed to be a private body or entity. However, the measure could still be otherwise attributable to the state because the SOE or private company could still have acted

⁷⁷ See *Canada – FIRA*, *supra* n. 21, at para. 5.6.

⁷⁸ It should be mentioned that the WTO allows for autonomous customs territories to become members even if they are not states.

⁷⁹ This is not analysed separately for GATT Art. III:2 as fiscal measures can only be imposed by governments, see Petros C. Mavroidis, *Trade in Goods* 237 n. 91 (Oxford U. Press 2007).

⁸⁰ See *United States – Definitive Antidumping and Countervailing Duties on Certain Products from China* Appellate Body Report, WT/DS379/AB/R (11 Mar. 2011) [hereinafter *US – AD CVD Appellate Body Report*], para. 345.

⁸¹ See *ibid.*, para. 346.

⁸² *Ibid.*, para. 346.

on the instructions of the government. Under WTO law, if a 'link' or 'nexus' to the government can be established, even private company local content requirements can fall within Article III:4. The Panel in *Canada – Autos* analysed the issue of nexus to the government in relation to private companies:

A determination of whether private action amounts to a 'requirement' under Article III:4 must . . . necessarily rest on a finding that there is a nexus between that action and the action of a government such that the government must be held responsible for that action. We do not believe that such a nexus can exist only if a government makes undertakings of private parties legally enforceable, as in the situation considered by the Panel on *Canada – FIRA*, or if a government conditions the grant of an advantage on undertakings made by private parties, as in the situation considered by the Panel on *EEC – Parts and Components*.

...

The word 'requirements' in its ordinary meaning and in light of its context in Article III:4 clearly implies government action involving a demand, request or the imposition of a condition but in our view this term does not carry a particular connotation with respect to the legal form in which such government action is taken. In this respect, we consider that, in applying the concept of 'requirements' in Article III:4 to situations involving actions by private parties, it is necessary to take into account that there is a broad variety of forms of government of (*sic*) action that can be effective in influencing the conduct of private parties.⁸³

In *Canada – Autos*, governmental letters to private companies were held to be a sufficient nexus.⁸⁴ Guidance on what constitutes a sufficient nexus can also be found in the general international law on attribution, namely Articles 4–11 of the Articles on State Responsibility, even though their use in WTO law is not unproblematic.⁸⁵

Most of the local content requirements, under these standards, are either imposed by a state or have to be attributed to one. In the example mentioned concerning Petrobras-ANP, the government itself included the content requirement in the concessions. The content requirement that Petrobras imposes usually is a mere consequence of that earlier governmental content requirement – Petrobras imposes it to fulfil its own obligations put down in the concession agreements. In fact, in the past Petrobras has actually been fined for not complying with the local content requirements. Only where the requirement imposed by Petrobras does not follow from the one imposed by the government, but is imposed by Petrobras autonomously is the attribution to the government more

⁸³ *Canada – Autos* Panel Report, *supra* n. 75, at para. 10.107.

⁸⁴ See *ibid.*, para. 10.123.

⁸⁵ Annex to GA Res. 56/83 of 12 Dec. 2001. See in this respect, I. Van Damme, *The Appellate Body's Use of the Articles on State Responsibility in US – Anti-Dumping and Countervailing Duties (China)*, in: *Enjoying Sovereignty? Between Statehood and State Responsibility*. Liber Dكتورandorum James Crawford (forthcoming).

problematic. In such cases, a nexus may be established by showing concrete government influence on the SOE's policy given that SOEs are state-owned.

The category of development banks, such as BNDES, has been evaluated by a Panel in *EC – Aircraft I* where the Panel in a later overturned obiter dictum vented its inability to determine whether development banks quite generally were to be considered 'government or public body':

However, as a general matter, it is not entirely clear to us whether such entities [EIB and other multilateral finance institutions (such as those cited by the European Communities – the Asian Development Bank, the European Bank for Reconstruction and Development, the Inter-American Development Bank and the International Finance Corporation)] may all be properly considered to be 'a government or any public body within the territory of a Member' for the purpose of Article 1.1(a)(1).⁸⁶

In some instances, the evaluation of whether SOEs can be considered part of the state will be the most difficult element to analyse when dealing with local content measures, in particular when considering that the status may differ depending on the transaction involved. Thus, Petrobras may at times act on its own accord and at other times under strict governmental mandate.

The *third element* of the analysis of Article III:4 of the GATT concerns whether the imported product is treated 'less favourably'. The GATT Article III concerns both de jure and de facto discrimination.⁸⁷ In local content cases, the discrimination is always de jure as the measure discriminates on the basis of the origin of the product, explicitly conditioning the grant of a benefit on the use of local content and thereby treating the imported product less favourably than the local one. This element will therefore nearly automatically be fulfilled in cases concerning local content. The Appellate Body has moved the analysis of this element beyond mere formalism, so that it concerns whether *different* treatment is to the *detriment* of the product at issue, actually changing the conditions of competition. In local content cases, the formally different treatment will no doubt modify the conditions of competition to the detriment of the imported products – in fact, that is why those requirements are set up in the first place. Most local content requirements thus run into conflict with Article III:4 of the GATT.

⁸⁶ *European Communities and Certain Member States – Measures Affecting Trade in Large Civil Aircrafts* Panel Report, WT/DS316/R (30 Jun. 2010) [hereinafter *EC – Aircraft* Panel Report], para. 7.888.

⁸⁷ See, e.g., *Canada – Certain Measures Affecting the Automotive Industry* Appellate Body Report, WT/DS139/AB/R, WT/DS142/AB/R (31 May 2000) [hereinafter *Canada – Autos* Appellate Body Report], para. 150. In *Canada – Autos* the Appellate Body cited to an early GATT case from 1958, see *Italian Discrimination Against Imported Agricultural Machinery* Panel Report, L/833 BISD 7S/60 (adopted 23 Oct. 1958) (GATT) [hereinafter *Italy – Agricultural Machinery* Panel Report] para. 12, which does not mention de facto discrimination explicitly. See also by now classic contribution on de facto discrimination in Lothar Ehring, *De Facto Discrimination in World Trade Law: National and Most-Favoured-Nation Treatment – or Equal Treatment?* 36 J. World Trade 921–977 (2002).

3.2[d] *Paragraph 5 of Article III*

Paragraph 5 of Article III of the GATT reads:

No contracting party shall establish or maintain any internal quantitative regulation relating to the mixture, processing or use of products in specified amounts or proportions which requires, directly or indirectly, that any specified amount or proportion of any product which is the subject of the regulation must be supplied from domestic sources. Moreover, no contracting party shall otherwise apply internal quantitative regulations in a manner contrary to the principles set forth in paragraph 1.

The provision is further explained in an 'Ad Article' contained in Annex I to the GATT. Ad Article III:5 provides:

Regulations consistent with the provisions of the first sentence of paragraph 5 shall not be considered to be contrary to the provisions of the second sentence in any case in which all of the products subject to the regulations are produced domestically in substantial quantities. A regulation cannot be justified as being consistent with the provisions of the second sentence on the ground that the proportion or amount allocated to each of the products which are the subject of the regulation constitutes an equitable relationship between imported and domestic products.

The provision clearly imposes two tests for internal quantitative regulations in its two sentences.⁸⁸ As to paragraph 5 first sentence, the GATT Panel in *US – Tobacco* established two analytical steps. First, it analysed whether there was an 'internal quantitative regulation relating to the mixture, processing or use of products in specific amounts or proportions ...'⁸⁹ Second, whether it 'requires, directly or indirectly, that any specified amount or proportion of any product which is the subject of the regulation must be supplied from domestic sources'.⁹⁰ Without going into much analysis, the Panel found a clear violation of paragraph 5 in the case it had to decide. The analysis of paragraph 5 first sentence in *EEC – Animal Feed Proteins* followed the same analytical structure, but left equally little guidance as to future interpretation.⁹¹

As for the second sentence of the provision, which has to be read together with Ad Article III:5, the GATT Panel in *US – Tobacco* exercised judicial economy, but the GATT Panel in *EEC – Animal Feed Proteins* did, in passing, make some remarks on it. The Panel held that since the EEC measure was within the scope of paragraph 1 and the second sentence referred to paragraph 1, the measure should be analysed under paragraph 1.⁹² Given the protectionist elements of the measure,

⁸⁸ Holger P. Hestermeyer, *Article III*, in *WTO – Trade in Goods* para. 89 (Rüdiger Wolfrum et al. eds., Martinus Nijhoff 2011).

⁸⁹ See *US – Tobacco* Panel Report, *supra* n. 70, at para. 67.

⁹⁰ *Ibid.*, para. 68.

⁹¹ See *EEC – Animal Feed Proteins*, *supra* n. 66, at paras. 4.5–4.6.

⁹² See *ibid.*, para. 4.6.

it found the measure to violate both paragraphs 1 and 5.⁹³ A similarly short analysis was provided by the GATT Panel in *Spain – Soyabean Oil*.⁹⁴ From these few remarks and the structure of the article it can be assumed that the second sentence imposes a three-prong test: a regulation violates it if: (1) it is an internal quantitative regulation, (2) not all of the products subject to the regulation are produced domestically in substantial quantities and (3) the regulation is applied so as to afford protection to domestic production.

Despite the scarcity of precedence, it may be fair to suggest that the majority of local content requirements will violate paragraph 5 first sentence because most will have a specific local content target – which essentially satisfies both elements of the test imposed by Article III:5, first sentence.

3.3 TRIMS (TRADE-RELATED INVESTMENT MEASURES)

The TRIMs Agreement negotiated during the Uruguay Round has its historical roots in the *Canada – FIRA* GATT case.⁹⁵ It was designed to prevent trade restrictive and distorting effects of investment measures⁹⁶ and specifically regards local content requirements as prohibited trade-related investment measures, as is highlighted on the WTO's own web page concerning 'Trade and Investment'.⁹⁷

The TRIMs Agreement is rather short. The provisions that are relevant for our purposes, namely Article 2 and the Annex, read as follows:

Article 2:1 Without prejudice to other rights and obligations under GATT 1994, no Member shall apply any TRIM that is inconsistent with the provisions of Article III or Article XI of GATT 1994.

Article 2:2 An illustrative list of TRIMs that are inconsistent with the obligation of national treatment provided for in paragraph 4 of Article III of GATT 1994 and the obligation of general elimination of quantitative restrictions provided for in paragraph 1 of Article XI of GATT 1994 is contained in the Annex to this Agreement.

...

Annex

1 TRIMs that are inconsistent with the obligation of national treatment provided for in paragraph 4 of Article III of GATT 1994 include those which are mandatory or enforceable under domestic law or under administrative rulings, or compliance with which is necessary to obtain an advantage, and which require:

- (a) the purchase or use by an enterprise of products of domestic origin or from any domestic source, whether specified in terms of particular products, in terms of

⁹³ See *ibid.*, para. 4.8.

⁹⁴ Panel Report, *Spain – Soyabean Oil*, L/5142 (not adopted), at paras. 4.4–4.5.

⁹⁵ See http://www.wto.org/english/tratop_e/invest_e/invest_e.htm.

⁹⁶ See the Preamble to the TRIMs Agreement.

⁹⁷ See http://www.wto.org/english/tratop_e/invest_e/invest_e.htm.

- volume or value of products, or in terms of a proportion of volume or value of its local production; or
- (b) that an enterprise's purchases or use of imported products be limited to an amount related to the volume or value of local products that it exports.

When it comes to substantive obligations,⁹⁸ the negotiating parties did not add much to the existing state of the law, as can be seen by the explicit limitation of the scope of the agreement to investment measures related to trade in goods (Article 1) and the references to the obligations of the GATT (Article 2) and its exceptions (Article 3). However, the wording of the TRIMs Agreement clarifies that performance requirements imposed on investors to allow them to invest or operate in the host country⁹⁹ – relevant for our purposes are local content requirements attached to permits to invest or establish oneself – do not escape scrutiny under the relevant GATT provisions. Additional clarity is provided by the illustrative list in the Annex to the Agreement. *If* a measure falls within the illustrative list, it automatically violates the correlating GATT provision. This understanding was confirmed by the Panel in *Canada – Renewable Energy*:

Article 2.2 of the TRIMs Agreement does not impose any obligations on Members, but rather informs the interpretation of the prohibition set out in Article 2.1. In particular, Article 2.2 explains that the TRIMs described in the Illustrative List of the Annex to the TRIMs Agreement are to be considered inconsistent with Members' specific obligations under Articles III:4 and XI:1 of the GATT 1994.¹⁰⁰

Local content measures falling under the TRIMs Agreement thus also conflict with the obligations of that Agreement. However, the sentence following immediately after this passage recalls that also in the context of the TRIMs Agreement Article III:8(a) of the GATT applies, so that government procurement is not merely exempted from obligations under Article III of the GATT, but also from the application of Article III under the TRIMs Agreement:

It does not follow, however, that TRIMs having the same characteristics as those described in Paragraph 1(a) of the Illustrative List must be automatically found to be inconsistent with Article III:4 of the GATT 1994 *when they would otherwise be covered by the terms of Article III:8(a) of the GATT 1994*. Such a reading of Article 2.2 would be inconsistent with the clear terms of Article 2.1, which explicitly state that there will be a violation of Article

⁹⁸ As to procedure, the TRIMs Agreement reaffirms obligations under Art. X of the GATT. Importantly, it provides for a notification of TRIMs in force at the time of entry into force of the WTO Agreement and their elimination (Art. 5). The Agreement also sets up the Committee on Trade-Related Investment Measures (Art. 7).

⁹⁹ See R. Schlegelmilch, *WTO: Why Still no Multilateral Rules for Foreign Direct Investment?* 6 Int'l. Trade L. & Reg. 78, 82 (2000).

¹⁰⁰ *Canada – Measures Affecting the Renewable Energy Generation Sector* Panel Report, WT/DS412/R, WT/DS426/R (19 Dec. 2012) [hereinafter *Canada – Renewable Energy* Panel Report], para. 7.119.

2.1 of the TRIMs Agreement whenever a measure is inconsistent with Article III of the GATT 1994. This refers to *the whole of Article III, including Article III:8(a)*.¹⁰¹

This holding was, unsurprisingly, confirmed by the Appellate Body.¹⁰²

3.4 GOVERNMENT PROCUREMENT

Even though most local content measures thus run into conflict with the substantive obligations under Article III of the GATT (and the TRIMs Agreement), several governments apparently considered them justified as measures of government procurement. Government procurement is regulated by the plurilateral Agreement on Government Procurement (GPA).¹⁰³ As mentioned, it is excluded from the scope of the national treatment obligation by Article III:8(a) of the GATT (also applicable within the context of the TRIMs Agreement):

The provisions of this Article shall not apply to laws, regulations or requirements governing the procurement by governmental agencies of products purchased for governmental purposes and not with a view to commercial resale or with a view to use in the production of goods for commercial sale.

Government procurement is also exempt from the normal obligations relating to State Trading Enterprises (STEs) by virtue of Article XVII:2 of the GATT:

The provisions of paragraph 1 of this Article shall not apply to imports of products for immediate or ultimate consumption in governmental use and not otherwise for resale or use in the production of goods for sale. With respect to such imports, each contracting party shall accord to the trade of the other contracting parties fair and equitable treatment.¹⁰⁴

Defining the exact scope of Article III:8(a) is hence crucial for the determination of the legality of local content measures. To date, the scope of the provision has only been analysed in *Canada – Renewable Energy*.

Both the wording of Article III:8(a) and Article XVII:2¹⁰⁵ of the GATT as well as the fact that the drafters saw the need to provide for specific exemptions, or in the words of the Appellate body ‘derogations’,¹⁰⁶ for each obligation suggest an exclusion of government procurement from the obligations under Article III and Article XVII:1 – *not* the entire GATT. This is quite contrary to the popular

¹⁰¹ *Ibid.*

¹⁰² See *Canada – Renewable Energy* Appellate Body Report, *supra* n. 4, at para. 5.33.

¹⁰³ Annex 4 to the WTO Agreement.

¹⁰⁴ Ad Art. XVII:2 provides: ‘The term ‘goods’ is limited to products as understood in commercial practice, and is not intended to include the purchase or sale of services.’

¹⁰⁵ For reasons of space, we shall limit ourselves to discussing Art. III:8(a).

¹⁰⁶ The Appellate Body might have chosen this peculiar term due to its wish to explicitly ‘not pre-determine’ the question of the burden of proof. See *Canada – Renewable Energy* Appellate Body Report, *supra* n. 4, at para. 5.56.

understanding that government procurement is only subject to the substantive obligations in the GPA. The Appellate Body in *Canada – Renewable Energy*, however, made this point very clear:

Article III:8(a) therefore establishes a derogation from the national treatment obligation of Article III for government procurement activities falling within its scope. Measures satisfying the requirements of Article III:8(a) are not subject to the national treatment obligations set out in other paragraphs of Article III. Article III:8(a) is a derogation limiting the scope of the national treatment obligation and it is not a justification for measures that would otherwise be inconsistent with that obligation.¹⁰⁷

Article III:8(a) imposes three conditions: (1) the challenged measure has to be characterized as ‘laws, regulations or requirements governing the procurement of products purchased’, (2) it has to involve ‘procurement by governmental agencies’ and (3) the procurement has to be undertaken ‘for governmental purposes and not with a view to commercial resale or with a view to use in the production of goods for commercial sale’.¹⁰⁸

The first prong proved to be the most important element in the *Canada – Renewable Energy* Appellate Body Report. Canada had tried to justify its FIT programme, which – as mentioned – conditioned the participation of producers of renewable energy on the use of domestic goods and services in the development and construction of the facility producing the energy, as government procurement, arguing that it was a programme governing the procurement of electricity by the government of Ontario. As to the first prong of Article III:8, the panel had held that the domestic content requirements of the programme indeed were requirements governing the procurement of electricity by the government, and that there was a close relationship between the products affected by the domestic content requirements (renewable energy generation equipment) and the product procured (electricity). The Appellate Body, however, accepted the EU’s argument that the product being subject to the local content requirement is renewable energy generation equipment (purchased by the generators of such electricity), but the product purchased by governmental agencies is electricity. It considered this difference to be decisive, as the first prong of paragraph 8(a) read in the context of the other paragraphs of Article III requires the product procured and the product discriminated against to be in a competitive relationship.¹⁰⁹ This holding largely eliminates the possibility of relying on the derogation in paragraph 8(a) in future cases on local content requirements on renewable energy generation equipment, as the content requirement is commonly attached to the purchase of the energy.

¹⁰⁷ *Ibid.*, para. 5.56.

¹⁰⁸ See *ibid.*, paras. 5.39; 5.59–5.60, 5.64. Note that the Panel had omitted the words ‘of products’ from the first prong, which might have resulted in its error.

¹⁰⁹ See *ibid.*, paras. 5.62, 5.63, 5.75, 5.79.

However, its implications may reach vastly beyond the field of renewable energy. It seems to severely restrict how remote the content requirement can be in relation to the product procured. Thus, a government, when buying cars, might be able to justify its preference for national cars as government procurement. However, it may not be able to condition its procurement of cars on the motor being manufactured locally. The holding thus even has the potential to touch upon content requirements that aggregate all of the goods and services used to produce a good that is procured. The Appellate Body saw the potentially broad scope of its holding and explicitly stated that it does not intend the report to extend to discrimination relating to inputs and processes of production used in respect of products purchased by way of procurement and rules for determining the origin of products purchased.¹¹⁰ Thus, some insecurity in the interpretation of the first prong of Article III:8(a) remains.

The Appellate Body did not enter into an application of the law of the second and third prongs to the facts in this case, but opined *in abstracto* on the findings of the Panel. The fact that this analysis constitutes obiter dictum rather than part of the *ratio* of the decision is unlikely to have a practical effect in the sense that the Appellate Body tends to rely quite extensively on its prior statements – regardless of their perceived status of obiter dictum.

Under the second prong, the procurement has to be effected by ‘governmental agencies’. The Appellate Body considers these to be ‘those entities acting for or on behalf of government in the public realm within the competences that have been conferred on them to discharge governmental functions’.¹¹¹ Merely state-owned companies such as Petrobras are thus removed from the ambit of the paragraph 8(a) derogation from the national treatment obligation where they are not acting on behalf of the government with some type of governmental authority, which will rarely be the case. This requirement is also relevant when one analyses local content requirements handed down in a production chain. In such cases, the first purchase is done by a governmental agency and will satisfy the second element of Article III:8(a) – for example the order of some wind turbines by a governmental agency. However, when the private company producing the wind turbines makes the second purchase of parts for the production of the turbine, that purchase is done by a private entity and will not satisfy the second element of Article III:8(a), which will therefore not apply. Consequently, a local content requirement imposed by private companies may be in breach of Article III:4 or 5 if it can be substantiated that the requirement stemmed from a law or

¹¹⁰ See *ibid.*, para. 5.63 and n. 500.

¹¹¹ See *ibid.*, para. 5.61. Of course this analysis is reminiscent of the analysis whether an entity is subject to obligations under Art. III of the GATT in the first place.

requirement by the government, even though the private company imposes it to fulfil a content requirement imposed by the government as part of government procurement. The Appellate Body also considered the meaning of the term 'procurement'. The Panel had found it to mean 'purchase'.¹¹² The Appellate Body, however, opined that this definition was too narrow:

The use of the word 'purchased' in the same provision suggests reading the word 'procurement' as referring to the process of obtaining products, rather than as referring to an acquisition itself, because, if procurement was understood to refer simply to any acquisition, it would not add any meaning to Article III:8(a) in addition to what is already expressed by the word 'purchased'. We therefore understand the word 'procurement' to refer to the process pursuant to which a government acquires products. The precise range of contractual arrangements that are encompassed by the concept of 'purchase' is not a matter we need to decide in this case.¹¹³

Finally, to fall under Article III:8(a), the procurement measure has to be 'for governmental purposes and not with a view to commercial resale or with a view to use in the production of goods for commercial sale'. The Panel in *Canada – Renewable Energy* had interpreted the terms rather narrowly, but had focused on the question of commercial resale, considering the term 'for governmental purposes' to be informed and limited by the following elements of the third prong of Article III:8(a).¹¹⁴ The Appellate Body criticized the Panel for thus effectively neglecting one element of what are effectively two cumulative requirements: 'for governmental purposes' and 'not with a view to commercial resale or with a view to use in the production of goods for commercial sale'.¹¹⁵ It went on to define 'governmental purposes' in a narrow sense:

[B]ecause governmental agencies by their very nature pursue governmental aims or objectives, the additional reference to 'governmental' in relation to 'purposes' must go beyond simply requiring some governmental aim or objective with respect to purchases by governmental agencies.¹¹⁶

Both the French (*les besoins des pouvoirs publics*) and Spanish versions of the provision (*las necesidades de los poderes públicos*), corresponding more with the term 'need' than 'purpose', also point towards purchases for the needs of the government.¹¹⁷ Considering Article XVII:2 to provide context in the interpretation of Article III:8(a), the Appellate Body ultimately found that:

¹¹² *Canada – Renewable Energy* Panel Report, *supra* n. 100, at para. 7.135.

¹¹³ See *Canada – Renewable Energy* Appellate Body Report, *supra* n. 4, at para. 5.59.

¹¹⁴ See *Canada – Renewable Energy* Panel Report, *supra* n. 100, at paras. 7.139–7.145, 7.151.

¹¹⁵ See *Canada – Renewable Energy* Appellate Body Report, *supra* n. 4, at paras. 5.65, 5.69.

¹¹⁶ *Ibid.*, para. 5.66.

¹¹⁷ See *ibid.*, para. 5.67.

the phrase 'products purchased for governmental purposes' in Article III:8(a) refers to what is consumed by government or what is provided by government to recipients in the discharge of its public functions. The scope of these functions is to be determined on a case by case basis. Finally, we recall that Article III:8(a) refers to purchases 'for governmental purposes'. The word 'for' relates the term 'products purchased' to 'governmental purposes', and thus indicates that the products purchased must be intended to be directed at the government or be used for governmental purposes. Thus, Article III:8(a) requires that there be a rational relationship between the product and the governmental function being discharged.¹¹⁸

This interpretation of the third element will remove many local content measures states considered to be government procurement from the ambit of the paragraph 8(a) derogation because only very few purchases can be said to be consumed by government or provided by government to recipients in the discharge of public functions.

In *Canada – Renewable Energy*, neither the Panel nor the Appellate used the GPA for guidance in interpreting the scope of government procurement. That (plurilateral) Agreement so far defined its scope in terms diverging from Article III:8(a) as 'any law, regulation, procedure or practice regarding any procurement by entities covered by this Agreement, as specified in Appendix I' (Article I:1). The recent amendment of the GPA, which has not yet entered into force, does, however, repeat a similar delimitation as in Article III:8 (a) of the GATT:

Article II:2 For the purposes of this Agreement, covered procurement means procurement for governmental purposes:

(a) of goods, services, or any combination thereof:

...

(ii) not procured with a view to commercial sale or resale, or for use in the production or supply of goods or services for commercial sale or resale.¹¹⁹

The GPA, as a plurilateral Agreement, only binds those WTO Members that have signed on to it. Those members are then bound by the Agreement's national treatment obligation, which reads in its current form (Article III:1):

With respect to all laws, regulations, procedures and practices regarding government procurement covered by this Agreement, each Party shall provide immediately and unconditionally to the products, services and suppliers of other Parties offering products or services of the Parties, treatment no less favourable than:

¹¹⁸ *Ibid.*, para. 5.68 [emphasis added, footnotes omitted].

¹¹⁹ Adoption of the Results of the Negotiations Under Art. XXIV:7 of the Agreement on Government Procurement, Following Their Verification and Review, as Required by the Ministerial Decision of 15 Dec. 2011 (GPA/112), para. 5; Action taken by the Parties to the WTO Agreement on Government Procurement at a Formal Meeting of the Committee, at the Level of Geneva Heads of Delegations, on 30 Mar. 2012, GPA/113, 2 Apr. 2012. At the time of this writing, the amendment has been ratified only by Liechtenstein.

- (a) that accorded to domestic products, services and suppliers; and
- (b) that accorded to products, services and suppliers of any other Party.

This raises the question why Japan and the EU had not invoked the GPA as an alternative claim in *Canada – Renewable Energy* in case Canada's action was considered government procurement. The answer can be found in the entities covered by the Agreement, which a state can designate: the Ontario Power Authority implementing the programme at issue is not bound by the Agreement.¹²⁰ The possibility for local governments to be excluded from the GPA makes the scope of Article III:8(a) of the GATT particularly important for procurement by local governments.

3.5 CONCLUDING OBSERVATIONS ON THE GATT/TRIMS LEGALITY OF LOCAL CONTENT MEASURES

Our analysis has shown that most local content measures described in our taxonomy would run afoul of the national treatment obligation in Article III:4 and/or 5 of the GATT. To the extent a measure falls within the ambit of the derogation in paragraph 8(a), it still violates the GPA where the WTO Member has signed on to the GPA. There are however a few loop holes: certain WTO Members have not signed on to the GPA or have exempted certain local governments. In those instances, the exact scope of the paragraph 8(a) derogation becomes vital because the provision will then shield measures imposed by those entities from the application of the national treatment provisions. In *Canada – Renewable Energy*, the Appellate Body and Panel have however narrowed the scope of this derogation significantly. Local content measures for renewable energy generation equipment have thus been carved out from the ambit of the derogation where governmental agencies purchase electricity conditioned on compliance with the content requirement and then resell the electricity. Similarly not covered by Article III:8(a) of the GATT may be many of what could be called 'secondary purchases', i.e., private companies' local sourcing of products to comply with a local content requirement in a tender requiring local content, which may thus be in violation of Article III of the GATT if the local content requirement can be attributed to the state. Finally, the Appellate Body's interpretation of 'governmental purposes' qualifies only very few measures as government procurement in the sense of consumption of the government, such as the purchase of computers, paper clips, autos, and perhaps even solar panels on the roof tops of government

¹²⁰ See Canada's GPA Appendix 1, Annex 2 (available at http://www.wto.org/english/tratop_e/gproc_e/appendices_e.htm#cane). See also WTO Panel Hearing: Canada Defends Feed-in Tariff as Necessary Govt Procurement, ICTSD Vol. 16 Number 12 of 28 Mar. 2012.

buildings if the electricity they generate is for governmental consumption only. Some may even argue that the procurement of busses or trams for public transport would not fall under the strict definition of governmental purposes. This might go too far, however, as public transport is arguably provided by the government to recipients in the discharge of public functions.

3.6 STATE TRADING ENTERPRISES: GATT ARTICLE XVII

Local content rules not imposed by the government itself, but by State Trading Enterprises (STEs) can, as the case may be, escape the national treatment discipline in Article III because they lack the necessary nexus with the government. Naturally, if the government mandates local content in e.g. all solar panels, this would violate the national treatment principle in Article III. The question is whether local content requirements imposed by STEs themselves without a nexus to the government can still be disciplined under the national treatment obligation – not directly, but through Article XVII of the GATT.¹²¹

The wording of Article XVII:1(a), may, at first glance, convey the impression that STEs must comply with *all* the principles of non-discriminatory treatment in the GATT; i.e., both most-favoured nation treatment and national treatment: ‘such enterprises shall . . . act in a manner consistent with the general principles of non-discriminatory treatment . . .’. It seems, however, that many of the founding fathers of the WTO only wanted the obligation of most-favoured nation treatment to apply and wanted to *exclude* the application of the national treatment obligation to STEs.¹²² Early GATT Panels adhered to the *travaux préparatoires* and found that national treatment was not included in the Article XVII obligations.¹²³

The Appellate Body has not opined on whether national treatment is included in Article XVII. As late as in 2004, the Appellate Body noted the discussion on whether national treatment applies, but refrained from commenting further.¹²⁴ However, the wording of the provision fails to clearly state that the national treatment obligation does not apply. Recourse to the *travaux préparatoires* is only permissible under Article 32 of the Vienna Convention on the Law of Treaties as a supplementary means of interpretation. The Panel in *Korea – Beef* in

¹²¹ See William J. Davey, *Article XVII GATT: An Overview*, in *State Trading in the Twenty First Century* 26 (Thomas Cottier & Petros C. Mavroidis eds., U. Michigan Press 1998).

¹²² See Multilateral Trade Negotiations, The Uruguay Round, Negotiation Group on GATT Articles, Art. XVII (State Trading Enterprises), N. by the Secretariat, Addendum, 21 Dec. 1988, Special Distribution, Restricted [document], MTN.GNG/NG7/W/15/Add.1, paras. 18–19 (available at <http://gatt.stanford.edu>).

¹²³ See *ibid.*

¹²⁴ *Canada – Measures Relating to Exports of Wheat and Treatment of Imported Grain* Appellate Body Report, WT/DS276/AB/R (27 Sep. 2004) [hereinafter *Canada – Wheat* Appellate Body Report], n. 104.

2000 hence – in our view correctly – held that *both* MFN and national treatment are included in XVII.¹²⁵ In *Canada – Renewable Energy*, the Panel, in an obiter dictum opined with reference to the Panel in *Korea – Beef*, that national treatment is included in Article XVII.¹²⁶

It seems counterintuitive in 2013 that the national treatment principle should not apply to STEs – in particular in light of the continuing relevance and significance of STEs in a number of WTO Members. It would also run against the objective of Article XVII:1(a), which serves as an anti-circumvention provision.¹²⁷ However, it remains to be seen how the Appellate Body will rule on the issue.

3.7 THE SCM AGREEMENT

Local content measures can also run afoul of the SCM Agreement. That Agreement regulates subsidies and countervailing measures in trade in goods. Article 3.1(b) of the SCM Agreement provides the most explicit prohibition against local content measures in the WTO Agreements:

3.1. Except as provided in the Agreement on Agriculture, the following subsidies, within the meaning of Article 1, shall be prohibited:

...

(b) Subsidies contingent, whether solely or as one of several other conditions, upon the use of domestic over imported goods.

The prohibition is backed up by a special remedy in Article 4.7 of the SCM Agreement demanding withdrawal of the subsidy without delay if a panel found the subsidy to be prohibited. Panels specify a time period for withdrawal of the subsidy and have generally granted ninety days to do so.¹²⁸ This deviates from the ‘normal’ implementation period laid down in Article 21.3 of the DSU that provides for a ‘reasonable period of time’ of a maximum of fifteen months. Also, the DSB normally gives recommendations of bringing the measure into conformity with the WTO Agreements, whereas SCM Article 4.7 dictates what the WTO Member must do in order to be in compliance with the WTO Agreements.¹²⁹

¹²⁵ See *Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef* Panel Report, WT/DS161/R, WT/DS169/R (31 Jul. 2000) [hereinafter *Korea – Beef* Panel Report], para. 753. Since then, scholars have differed greatly on whether national treatment applies/ought to apply. See Sue Arrowsmith & Robert D. Anderson, *The WTO Regime on Government Procurement: Challenge and Reform* (Cambridge U. Press 2011).

¹²⁶ See *Canada – Renewable Energy* Panel Report, *supra* n. 100, at para. 7.143.

¹²⁷ T. Voon, *Article XVII*, in *WTO – Trade in Goods* para. 14 (Rüdiger Wolfrum et al. eds., Martinus Nijhoff 2011).

¹²⁸ K. Adamantopoulos, *Article 4 SCMA*, in *WTO – Trade Remedies* para. 11 (R. Wolfrum et al. eds., Martinus Nijhoff 2008).

¹²⁹ The ‘normal’ recommendations are laid down in DSU Art. 19.

Unlike some of the obligation outlined above under the GATT and the TRIMs, the SCM Agreement applies to government procurement with respect to goods.¹³⁰ This makes the SCM Agreement particularly valuable for cases concerning local content measures in the field of government procurement against countries that are not parties to the GPA or have exempted local government, so that the measures are neither subject to Article III of the GATT because of Article III:8(a) of the GATT nor to the GPA.

In order to challenge a measure under the SCM Agreement, the measure must be proven to constitute a subsidy, as defined in SCM Article 1.1. In order to establish that a measure is a subsidy, it has to grant a 'financial contribution', confer a 'benefit'¹³¹ and be specific.¹³² According to Article 2.3, subsidies falling under Article 3 need not pass the specificity test in Article 2, so that we will only be concerned with the first two prongs. These remaining two elements are analysed separately – thus, a benefit conferred under a local content scheme does not automatically constitute a 'financial contribution'. Given the numerous and diverse issues that are posed by the various types of local content measures, we shall limit ourselves to some comments.

As to the first prong, establishing a financial contribution in cases involving local content is not necessarily an easy operation. The requirement is explained in Article 1.1(a) of the SCM Agreement, which reads:

(1) there is a financial contribution by a government or any public body within the territory of a Member (referred to in this Agreement as 'government'), i.e. where:

- (i) a government practice involves a direct transfer of funds (e.g. grants, loans, and equity infusion), potential direct transfers of funds or liabilities (e.g. loan guarantees);
- (ii) government revenue that is otherwise due is foregone or not collected (e.g. fiscal incentives such as tax credits);
- (iii) a government provides goods or services other than general infrastructure, or purchases goods;
- (iv) a government makes payments to a funding mechanism, or entrusts or directs a private body to carry out one or more of the type of functions illustrated in (i) to (iii) above which would normally be vested in the government and the practice, in no real sense, differs from practices normally followed by governments;

or

(a)(2) there is any form of income or price support in the sense of Article XVI of GATT 1994.¹³³

¹³⁰ Article. 1.1(a)(1)(iii).

¹³¹ The two elements are determined individually, see Appellate Body Report, *Brazil – Export Financing Programme for Aircraft*, WT/DS46/AB/R. (2 Aug. 1999) [hereinafter *Brazil – Aircraft* Appellate Body Report], para. 157.

¹³² See Arts 1, 2 of the SCM Agreement.

¹³³ Internal footnotes deleted.

The complexity of the analysis is demonstrated by the fact that in *Canada – Renewable Energy*, Japan and Europe argued with varying preference that the feed-in tariff under discussion constitutes either a (potential) direct transfer of funds under Article 1.1(a)(1)(i), or a form of income or price support under Article 1.1(a)(2),¹³⁴ or a governmental action involving entrustment under Article 1.1(a)(1)(iv) or (should the panel so find with respect to Article III:8(a) of the GATT) a purchase of goods under Article 1.1(a)(1)(iii).¹³⁵ Indeed, a local content measure attaching a benefit to the use of local content may fall under several of these headings.¹³⁶ The ‘purchase of goods’ variant deserves a particular mention, as it shows that government procurement of goods can constitute a relevant financial contribution. Where a feed-in tariff programme is constructed in a manner that a government agency buys the electricity produced this can be the case, as the Panel stated in *Canada – Renewable Energy*:

Thus, in the light of the foregoing analysis, it follows that ‘government purchases [of] goods’ will arise under the terms of Article 1.1(a)(1)(iii) of the SCM Agreement when a ‘government’ or ‘public body’ obtains possession (including in the form of an entitlement) over a good by making a payment of some kind (monetary or otherwise). In our view, and for the reasons we explain in the following paragraphs, this is exactly what happens through the FIT Programme and its related FIT and microFIT Contracts.¹³⁷

When the financial contribution is granted by a SOE, the issue of whether it is the government or a public body or a private body that granted the contribution arises. Both situations can fall under the SCM Agreement. Article 1.1(a)(1) uses the terms ‘government or any public body’. As noted above,¹³⁸ the term ‘public body’ (in remarkable similarity to Article 5 of the ILC Articles on State Responsibility) requires an analysis whether the relevant entity is vested with or exercises governmental authority.¹³⁹ If, under this test, the body in question is a private body, Article 1.1(a)(iv) of the SCM Agreement still assumes the existence of a financial contribution by a government if the government entrusts or directs the private body to carry out functions under Article 1.1(a)(1)(i)–(iii) that are

¹³⁴ An extensive treatment of Art. 1.1(a)(2) can be found in the amicus brief in *Canada – Renewable Energy* Appellate Body report submitted by L. Rubini (also available at <http://www.birmingham.ac.uk/Documents/college-artslaw/law/iel/rubini-2013-amicus-curiae.pdf>).

¹³⁵ *Canada – Renewable Energy* Panel Report, *supra* n. 100, at paras. 7.169–7.180.

¹³⁶ The Appellate Body clarified that a measure may very well fall within several categories of Art. 1.1(a)(1), see *Canada – Renewable Energy* Appellate Body Report, *supra* n. 4, at para. 5.121.

¹³⁷ *Canada – Renewable Energy* Panel Report, *supra* n. 100, at para. 7.231, upheld by the Appellate Body, see *Canada – Renewable Energy* Appellate Body Report, *supra* n. 4, at para. 5.128.

¹³⁸ See the analysis of Art. III:4.

¹³⁹ See, e.g., the detailed account of elements to consider in *Canada – Renewable Energy* Panel Report, *supra* n. 100, at paras. 7.232–7.241.

normally vested in governments. The question of when an entity is a public body would arise, for example, should a complaint against a development bank such as BNDES ever arise. Aid by such a bank would arguably fall under Article 1.1(a)(1)(i) because the bank constitutes a public body (exercising governmental authority) and provides a loan (on favourable terms) conditioned on using a certain amount of local content.¹⁴⁰

Analysing the next prong, namely whether the measure confers a benefit on the recipient of the subsidy (Article 1.1(b) of the SCM Agreement), can be, if anything, more problematic. In general, the prong demands that the measure makes the recipient better off economically than it would have been absent the financial contribution.¹⁴¹ This determination is made using Article 14 of the SCM Agreement as the relevant context.¹⁴² The legal standard for evaluating a benefit should not be confused with the standard for finding an advantage under the TRIMs Agreement. This was clarified by the Appellate Body in *Canada – Renewable Energy*:

[W]hile we do not exclude that certain measures that provide an advantage within the meaning of paragraph 1 of the Illustrative List of the TRIMs Agreement may also confer a benefit within the meaning of Article 1.1(b) of the SCM Agreement, it is conceivable that a measure that confers an advantage within the meaning of paragraph 1 of the Illustrative List of the TRIMs Agreement be found not to confer a benefit within the meaning of Article 1.1(b) of the SCM Agreement.¹⁴³

In many cases involving local content requirements, proving ‘benefit’ – using Article 14 of the SCM Agreement as guidance, should be possible. For the purchase of goods, as Article 14 (d) of the SCM Agreement indicates, it has to be shown that the purchase is made for more than adequate remuneration determined in relation to prevailing market conditions for the good in question. However, the operation becomes complex wherever there is no real ‘market’ to speak of.

The issue of benefit thus became one of the most contested issues in *Canada – Renewable Energy*. Government operation on the electricity market ensured that there was no competitive electricity market that could be used as a proper comparator. Luca Rubini, in an amicus brief submitted to the Appellate Body,

¹⁴⁰ See, e.g., *Japan – Countervailing Duties on Dynamic Random Access Memories From Korea* Appellate Body Report, WT/DS336/AB/R (28 Nov. 2007) [hereinafter *Japan – DRAMS* Appellate Body Report], para. 251.

¹⁴¹ K. Adamantopoulos, *Article 1 SCMA*, in *WTO – Trade Remedies* para. 92 (R. Wolfrum et al. eds., Martinus Nijhoff 2008).

¹⁴² See, e.g., *Canada – Renewable Energy* Appellate Body Report, *supra* n. 4, at para. 5.163.

¹⁴³ *Ibid.*, para. 5.209.

argued that nevertheless it should be comparatively easy to establish a benefit: where it is obvious that a state measure leads to abnormal economic behaviour and this is to the advantage of the addressee of the measure, there must be a benefit. The 'intuitive' argument hence is: where providers of renewable energy would be absent from the market but for the feed-in tariff, clearly a feed-in tariff allowing them to be on the market must establish a benefit.¹⁴⁴ The CJEU seems to approve of this intuitive line of argument, as it stated simply in a case concerning the *Stromeinspeisungsgesetz*: 'there is no dispute that an obligation to purchase electricity produced from renewable energy sources at minimum prices . . . confers a certain economic advantage on producers of that type of electricity, since it guarantees them, with no risk, higher profits than they would make in its absence'.¹⁴⁵

However, the WTO dispute settlement organs rejected the intuitive line of argument. The Panel instead looked for a proper market benchmark with which the price could be compared. It rejected several benchmarks based on the concept of a single market for all electricity as fundamentally distorted.¹⁴⁶ A benchmark based on a comparison between rates of return of the feed-in contracts with the relevant average cost of capital was considered, but could not be established for lack of information.¹⁴⁷

The Appellate Body, in its own analysis whether the recipient were 'better off' than it had been in the 'marketplace',¹⁴⁸ criticized the Panel's approach to establishing a benchmark. It considered that the Panel had not defined the relevant market properly,¹⁴⁹ failing to take into account different factors on the demand side, such as the type of customer,¹⁵⁰ as well as on the supply side.¹⁵¹ The Appellate Body divides the electricity market into sub-markets, recognizing both that renewable energy cannot compete with other energies because of different cost structures and the fact that governments by choosing a supply-mix based on policy imperatives such as reducing reliance on fossil fuels effectively define the sub-markets excluding competition between different ways to produce energy.¹⁵² The relevant market hence is determined according to Ontario's definition of the

¹⁴⁴ Paragraphs 71, 76. Note that the dissenting opinion seems to follow a similar line of reasoning when it states that facilitating the entry of a technology in an existing market by a financial contribution can be considered to confer a benefit. *Canada – Renewable Energy* Panel Report, *supra* n. 100, at para. 9.3.

¹⁴⁵ Case C-379/98 *PreussenElektra* [2001] ECR I-2099, para. 54.

¹⁴⁶ See *Canada – Renewable Energy* Panel Report, *supra* n. 100, at paras. 7.303–7.319.

¹⁴⁷ *Ibid.*, at para. 7.327.

¹⁴⁸ See *Canada – Renewable Energy* Appellate Body Report, *supra* n. 4, at paras. 5.163, 5.166.

¹⁴⁹ See *ibid.*, para. 5.169.

¹⁵⁰ See *ibid.*, para. 5.170.

¹⁵¹ See *ibid.*, para. 5.171.

¹⁵² *Ibid.*, paras. 5.167–5.179.

energy supply-mix.¹⁵³ Granting this liberty to establish 'artificial' markets makes it considerably harder to establish a benefit. The Appellate Body's reference to the policy imperatives is likely to be understood in a way that the Appellate Body will only accept such artificial market definitions where they are based on rational policy imperatives. Based on this different market definition, the Appellate Body turned to itself finishing the benefit analysis, but found itself unable to finish the analysis, observing that there were no sufficient factual findings or uncontested evidence on the records.¹⁵⁴

3.8 GATS

Like in the GATT, various GATS provisions, in particular the obligation of national treatment under Article XVII, apply to local content measures. The analysis of local content measures under the GATS is, however, more complex than it is for goods, largely due to the 'opt-in' approach adopted in the GATS context, under which national treatment is only granted '[i]n the sectors inscribed in [a Member's] Schedule, and subject to any conditions and qualifications set out therein'. Also, the GATS extends to four types of trade or 'modes of supply', defined largely on the basis of where and how the service supplier and consumer are situated during the transaction. Thus the GATS treats separately trade that is cross-border (supplier and consumer in different jurisdictions), or constitutes consumption abroad (consumer in supplier's jurisdiction), commercial presence (supplying company in consumer's jurisdiction) or presence of natural persons (supplying individual in consumer's jurisdiction). Viewed in the light of this schema, the GATT generally covers only a single mode, equivalent to cross-border trade.

In assessing the extent to which national treatment disciplines under Article XVII would apply to local content measures, we need to look at two situations. In the first, the measure requires the service supplier to purchase local content. In the second, it requires the consumer of the service to purchase local services. From the perspective of the service supplier, the former measure operates on the input side, while the latter operates on the output side. Note that on the input side, a local content measure may affect the purchase of both goods or services, and that on the output side the purchaser of the service may be a simple consumer, or a producer of goods or services. Wherever goods are at issue, the measure should also be examined under the GATT.

¹⁵³ *Ibid.*, para. 5.179.

¹⁵⁴ See *ibid.*, para. 5.246.

In assessing the applicability of Article XVII to a particular local content measure, it must first be determined whether a Member has undertaken a national treatment commitment for the relevant service and mode of supply. We note here a difference between the GATT and the GATS, since in the latter the national treatment obligation is a negotiable commitment recorded in a schedule ('opt-in'), instead of being mandatory across all sectors as in the GATT. If the Member does have such a commitment, the national treatment obligation applies and one needs to assess whether the local content measure accords less favourable treatment to the foreign service supplier.

The first of our hypothetical measures – requiring a service supplier to purchase local content – for obvious policy reasons typically applies to all service suppliers, both foreign and domestic. Discrimination of a foreign service supplier on the face of the measure (*de jure* discrimination) would not usually be found. However, whether or not there is discrimination on the face of the measure, the wording of Article XVII requires a broader test of whether the measure results *de facto* in a modification of 'conditions of competition' in favour of the domestic like service supplier.¹⁵⁵ For a local content requirement, this would prove most often to be the case, since it is likely easier for a domestic service supplier to source local inputs (familiarity with the market, likelihood of existing ties) than it would be for a like foreign service supplier. If the comparison takes case on the level of the content used (if that content is services) the discrimination can even be held to constitute *de jure* discrimination, as local content is explicitly preferred to foreign content.

The second category of local content measures requires the consumer to purchase local services rather than those of a foreign service provider. Such a measure discriminates on its face against foreign services and hence constitutes *de jure* discrimination.

It should be pointed out that the analysis would not differ if instead of an obligation to source all or part of the content locally there was a monetary inducement or other advantage given for doing so.

3.9 EXCEPTIONS FOR RENEWABLE ENERGY

Due to the *Canada – Renewable Energy* case, and the cases that were brought immediately after it, there has been a strong focus on the interface between renewable energy and trade. Whilst it appears attractive to enact special programmes to secure that renewable energy sources are given preferences *vis-à-vis*

¹⁵⁵ See *European Communities – Regime for Importation, Sale and Distribution of Bananas* Panel Report, WT/DS27/R (22 May 1997) [hereinafter *EC – Bananas* Panel Report], para. 6.106.

traditional sources so as to ensure that, e.g. wind power enters the market, such as in *Canada – Renewable Energy*, there seems to be no rational explanation how local content rules further this policy. It is entirely possible to give advantageous treatment to ‘green’ energy sources *without* requiring local content. This fact probably explains why Canada did not invoke Article XX(b) or (g) of the GATT as a defence for its violation of Article III – and as a defence for its SCM violation if one believes that Article XX is applicable in that context.¹⁵⁶

4 CONCLUSION

While our analysis shows that local content requirements can be constructed in a surprisingly diverse manner, the legal analysis demonstrated that despite their varied legal constructions, they rarely can survive judicial scrutiny – in particular after both the Panel and the Appellate Body in the *Canada – Renewable Energy* case narrowed the scope substantially for what can be considered government procurement. Consequently, more often than not they will violate Article III of the GATT and the TRIMs Agreement. The only local content measures that still qualify for the government procurement derogation in Article III:8(a) would be those where there was no commercial resale, where the local content requirement is on the product that is discriminated and where the procurement is for a governmental purpose. That would clearly be the case for items consumed by the government, such as paper clips, computers and governmental vehicles. However, whether the purchase of, e.g. trams or busses for public transportation qualifies depends on whether public transportation will qualify as governmental purpose. Finally, it could be argued that the derogation in Article III:8 only provides shelter for the first act of procurement by the government itself. Where the government constructs a procurement policy in which the local content requirement is handed down by the government contractor to its own sub-contractors arguably the procurement done by the contractor for its own purposes is, due to the construction of the government’s policy, both subject to Article III of the GATT and not exempted under Article III:8.

The SCM Agreement offers another line of attack against such measures. It may even be able to ‘catch’ measures qualifying for the government procurement derogation in Article III:8 in situations where the Member is not a signatory to the GPA or a local government is not bound by it. This could be situation if a local government sole sources a tram line, offering a higher price conditioned on it

¹⁵⁶ For a discussion of the applicability of Art. XX of the GATT to other Agreements, see, e.g., D. S. Feld & S. Switzer, *Whither Article XX? Regulatory Autonomy under Non-GATT Agreements after China – Raw Materials*, 38 Yale J. Intl. L. 16 (2012).

being produced locally. That situation would likely be caught by Article 3 of the SCM Agreement.

Given the shaky legal ground of local content measures, their widespread use would seem to indicate that they are an efficient tool in building and sustaining national industry. However, economic literature on such measures is very much split, depending on the assumptions made in the respective models.¹⁵⁷ To some extent, thus, Grossman's conclusion in his famous article on the issue still stands: 'Because the extent of protection or preference is not readily predictable, content protection and content preference may fail to attain the noneconomic objectives of the policy maker.' Even though a local content requirement may support the domestic upstream producer of intermediate goods, it also may end up hurting the domestic downstream producer and hurt their competitiveness.¹⁵⁸ The at best episodic empirical evidence shows the risk of such measures – building an uncompetitive national industry at enormous welfare costs.¹⁵⁹ One of the main practical problems in this context is that local content measures may help to upstart an industry, but they rarely are endowed with sunset clauses and soon become a measure of government perk, sustaining an increasingly inefficient industry. A government planning to implement a local content scheme should thus think long and hard before implementing it. The legality of the planned scheme has to be carefully analysed and the economic benefits studied. The difficulty to end such schemes should be born in mind and an exit strategy should be developed, before entrenched interests make exiting from an economically unviable policy difficult or impossible. Hopefully, governments will be more alert to the WTO illegality of most local content measures after the *Canada – Renewable Energy* case.

¹⁵⁷ See B. Munk, *The Welfare Costs of Content Protection*, 77 J. Political Econ. 85–98 (1969); A. Hollander, *Content Protection and Transnational Monopoly*, 23 J. Intl. Econ. 283–297 (1987); N. Vousden, *Content Protection and Tariffs under Monopoly and Competition*, 23 J. Intl. Econ. 263–282 (1987); M. Richardson, *The effect of a content requirement on a foreign duopsonist*, 31 J. Intl. Econ. 143–155 (1991); W. E. Takacs, *Domestic Content and Compensatory Export Requirements: Protection of the Motor Vehicle Industry in the Philippines*, 8 World Bank Econ. Rev. 127–149 (1994); L. D. Qiu & Z. Tao, *Export, Foreign Direct Investment, and Local Content Requirement*, 66 J. Dev. Econ. 101–125 (2001); K. Takechi & K. Kiyono, *Local Content Protection: Specific-Factor Model for Intermediate Goods Production and Market Segmentation*, 15 Japan & the World Econ. 69–87 (2003); W. Gu & S. Yabuuchi, *Local Content Requirements and Urban Unemployment*, 12 Intl. Rev. Econ. & Fin. 481–494 (2003); and the literature mentioned in the following footnotes.

¹⁵⁸ R. A. Belderbos & L. Sleuwaegen, *Local Content Requirements and Vertical Market Structure*, 13 European J. Political Econ. 101, 116 (1997).

¹⁵⁹ G. Pursell, *Australia's Experience with Local Content Programs in the Auto Industry* World Bank Policy Research Working Paper 2625 (June 2001); L. Johnson, *Problems of Import Substitution: The Chilean Automobile Industry*, 15 Econ. Dev. & Cultural Change 202 (1967). All views are voiced in the personal capacity of the authors only and should not be attributed to their employers.